

REMARKS

In the Official Action, the Examiner rejected claims 1-44. In the present response, Applicants have amended claims 1, 3, 10, 14, 16, 18, 24 and 39-44. Accordingly, Applicants respectfully request entry of these amendments and reconsideration of the present application.

Rejection Under 35 U.S.C. § 112

The Examiner rejected claims 6, 12, 19, and 44 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which is it most nearly connected, to make and/or use the invention. Specifically, the Examiner stated that the “specification fails to disclose any means, method or functional steps to obtain a quality factor for the speaker as claimed.” Applicants respectfully traverse the Examiner’s rejection.

The test for enablement is set forth in M.P.E.P. § 2164.01. From that section, the test for enablement appears to be whether one skilled in the art could make or use the invention from the disclosure in the patent coupled with information known in the art *without undue experimentation*. *See Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916). In order to make a rejection, the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. M.P.E.P. § 2164.04. Thus, the Examiner’s rejection should provide factors, reasons, and evidence that lead the Examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation. *Id.*

In the above quoted rejection, the Examiner asserted that the specification fails to disclose any means, method or functional steps to obtain a quality factor for a speaker. The

Examiner did not provide any support for this assertion nor did the Examiner cite any case law. Therefore, the Examiner has not satisfied the evidentiary burden required by the binding precedents cited above.

Indeed, in view of the present application, the Examiner cannot support this burden. The present application includes original claims that recite the quality factor, which is clearly supported in the specification. For instance, claim 6 recites “wherein said transducer has a Q_{TS} in the range of 0.65 to 0.8,” while claims 12, 19 and 44 recite “wherein said driver has a Q_{TS} in the range of 0.65 to 0.8.” The quality factor Q_{TS} is described as a value of the driver at residence frequency in freespace. *See Application, page 13, lines 29-30.* Further, the driver 120 is described as having a quality factor Q_{TS} in the range of 0.65 to 0.8. *See Application, page 15, lines 7-8.* The quality factor, which is clearly defined in the present application, as noted above, is simply a preferable range for the driver 120 to operate within. As such, the present application fully supports the claim recitations in claims 6, 12, 19, and 44. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of claims 6, 12, 19 and 44.

Rejection Under 35 U.S.C. § 102 and First Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 1-2, 4-5, 8-11, 13, 16-17, and 22-23 under 35 U.S.C. § 102(b) as being anticipated by Shin et al. (U.S. Patent No. 5,604,663). Further, the Examiner rejected claims 3, 14, 18, 24, 30-33, 35 and 37-38 under 35 U.S.C. § 103(a) as being unpatentable over Shin et al. (U.S. Patent No. 5,604,663) in view of Sugimura (U.S. Patent No. 5,926,627). In the present response, Applicants have amended independent claim 1 to incorporate subject matter from dependent claim 3, independent claim 10 to include subject matter from dependent claim 14, independent claim 16 to incorporate subject matter from dependent claim 18, and independent claim 24 to clarify the claimed subject matter. Further,

Applicants have amended dependent claims 3, 14, and 18 to further define the location of the *driver or transducer in the center of the rear wall*. Accordingly, because Applicants have amended the independent claims 1, 10 and 16 to incorporate the subject matter of dependent claims, the anticipation rejection is moot. Therefore, Applicants will address the rejection under Section 103, which relates to the subject matter incorporated into independent claims 1, 10 and 16, and independent claim 24.

In this rejection, the Examiner stated:

Regarding claims 3, 14, 18, 24 and 37-38, what's not taught by Shin as discussed above in independent claims 1, 10 and 16 is the speaker is mounted to a rear wall of the computer chassis that faces away from a user during normal use. Sugimura in Fig. 22 discloses a computer chassis with speakers being mounted to a rear wall that faces away from a user during normal use. It would have been to one of ordinary skill in the art to combine the teaching of Shin and Sugimura by mounting speakers at the rear wall of the computer chassis that faces away from a user during normal use in order to create a better stereophonic or surround sound effect. And the output sound generation would have been inherently created in a range in front of the user's face when using the computer system.

Applicants respectfully traverse the Examiner's rejection with regard to independent claims 1, 10, 16 and 24 and the claims depending therefrom. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination or modification. *See ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been

obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

In the above-quoted rejection, the Examiner relied on the Shin reference along with the Sugimura reference to disclose all of the recited features. The Examiner admitted that the Shin reference does not teach that the speaker is mounted to a rear wall of the computer chassis that faces away from the user during normal use. In an attempt to cure this deficiency, the Examiner relied on the Sugimura reference to disclose this recited feature. However, despite the Examiner's foregoing assertions, the Shin and Sugimura references fail to disclose a transducer mounted "in said chassis" and "to said rear wall" of the chassis, as recited in independent claims 1, 10, and 24, or a driver mounted "in said rear wall" of a chassis, as recited in independent claim 16. Hence, the Examiner's proposed combination of the Shin and Sugimura references, alone or in combination, fails to disclose all of the recited features, as discussed below.

A *transducer or driver mounted to the rear wall* is not disclosed in the Shin and Sugimura references. As noted above, the Examiner admitted that the Shin reference does not teach a speaker mounted to the rear wall. Thus, for the rejection to stand, the feature must be disclosed in the Sugimura reference. However, the Sugimura reference relates to an *external expander 2* that may be *attached* to the main body 1 of a personal computer. *See* Sugimura, col. 1, lines 7-20. To provide sound, a speaker unit 83 may be added to the expander 2. *See* Sugimura, Fig. 22, col. 12, lines 65-col. 13, line 4. As clearly illustrated, the speaker unit 83 is mounted on the outside of the rear wall the expander 2. At best, the Sugimura reference might suggest to one of ordinary skill in the art to replace the speakers 42 in the docking station 20 of the Shin reference by mounting the speaker unit 83 of the Sugimura reference to the external

portion of the rear wall of the docking station 20 of the Shin reference. Therefore, such modification does not meet the terms of the claims.

In addition, both the Shin and Sugimura references have speakers located in a docking station to which a personal computer, such as a notebook computer, may be attached. Neither reference discloses that the docking station or expander includes “at least one microprocessor,” as set forth in claim 1, a main system module including “at least one microprocessor,” as set forth in claim 10, or “one or more programmable processors,” as set forth in claim 16. Hence, neither the docking station 20 of Shin, nor the expander 2 of Sugimura, correspond to the “chassis” set forth in claims 1, 10, and 16. Therefore, even if the speaker unit 83 of Sugimura was mounted to the rear wall of the docking station 20 of Shin, it would not be mounted to the rear wall of the “chassis” recited in claims 1, 10 and 16.

Furthermore, claims 1, 10 and 24 require that the transducer or driver is mounted “in said chassis.” As discussed above, the Sugimura reference clearly discloses that the speaker unit 83 is mounted *externally* to the expander 2. As a result, one of ordinary skill in the art would be inclined, at best, to add the speaker unit 83 externally to the rear wall of the docking station 20. It is clear that the resulting device does not meet the terms of claims 1, 10 and 24, because the resulting device does not include a transducer or driver mounted “in” a chassis.

Because the Examiner has failed to show that the cited references disclose or suggest the claimed subject matter, the Examiner has failed to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request withdrawal of the rejections and allowance of independent claims 1, 10, 16 and 24, and the claims depending therefrom.

Second Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 20-21, 25-29, 34 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Shin et al. (U.S. Patent No. 5,604,663) in view of Sugimura (U.S. Patent No. 5,926,627) and Koyama et al. (U.S. Patent No. 5,581,621). Applicants respectfully traverse this rejection.

Each of the claims 20-21, 25-29, 34 and 36 depend from independent base claim 24, which is clearly patentable over the Shin and Sugimura references, as discussed above. In the rejection, the Examiner admitted that the Shin and Sugimura references do not specifically include an equalizer and gain staging for the computer system. In an attempt to remedy this deficiency, the Examiner relied on the Koyama reference. However, regardless of whether the Koyama reference discloses an equalizer and gain staging, it does not cure the deficiencies of the Shin and Sugimura combination discussed above.

Therefore, in view of the remarks set forth above, Applicants respectfully submit that the proposed combination, alone or in combination, does not render the claimed subject matter obvious. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of claims 20-21, 25-29, 34 and 36.

Third Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 7, 15 and 39-43 under 35 U.S.C. § 103(a) as being unpatentable over Shin et al. (U.S. Patent No. 5,604,663) in view of Sugimura (U.S. Patent No. 5,926,627) and well-known prior art. Applicants respectfully traverse this rejection.

In the present response, Applicants have amended independent claim 39 to incorporate subject matter of dependent claim 43, and amended dependent claim 43 to further describe the location of the driver in the rear wall. With regard to independent claim 39 and dependent claims 40-43, the Shin and Sugimura references, along with the Examiner's assertions of what is well-known prior art, do not disclose or teach "a driver mounted in said chassis to a rear wall thereof with said driver facing away from a user during normal use," as recited in independent claim 39, for the same reasons discussed above.

Because the cited references and the Examiner's assertions fail to disclose or suggest the presently claimed subject matter, the references and the Examiner's assertions have failed to support a *prima facie* case of obviousness. Therefore, Applicants respectfully request withdrawal of the rejection and allowance of claims 7, 15 and 39-43.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request withdrawal of the Examiner's rejections and allowance of claims 1-44. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.



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Respectfully submitted,

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